IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND the claims and ADD new claim 9 in accordance with the following:

1. (CURRENTLY AMENDED) A numerical controller for controlling a machine according to a machining program, comprising:

a storage device or medium ~~for~~ storing input/output units each including program block data obtained by dividing the machining program <u>among the input/output units,</u> ~~and~~ <u>each input/output unit including</u> additional information associated with the program block data, said additional information including an effective data length of the program block, front input/output unit data designating an input/output unit immediately preceding each input/output unit <u>in a sequence of the machining program,</u> and rear input/output unit data designating an input/output unit following each input/output unit in ~~a~~ <u>the</u> sequence of the machining program;

a processor ~~for~~ processing the input/output units; and

an interface ~~for~~ inputting/outputting the input/output units between said storage device or medium and said processor.

2. (CURRENTLY AMENDED) A numerical controller according to claim 1, wherein said processor reads a first input/output unit including a program block corresponding to a beginning part of the machining program and successively reads input/output units stored in said storage device or medium according to rear input/output unit data in the <u>previously</u> read input/output unit through said interface, <u>and wherein said processor</u> successively executes the program blocks included in the read input/output units.

3. (CURRENTLY AMENDED) A numerical controller according to claim 2, wherein when a branch instruction is included in the program block of the input/output unit ~~in execution~~ <u>when it is executed by said processor</u>, said processor reads <u>the</u> input/output units preceding the input/output unit ~~in execution~~ <u>being executed</u> using the front input/output unit data and reads <u>the</u> input/output units following the input/output unit ~~in execution~~ <u>being executed</u> using the rear input/output unit data to search <u>for</u> a line designated by the branch instruction.

4

4. (CURRENTLY AMENDED) A numerical controller according to claim 2, wherein said additional information further includes data specifying an input/output unit including a line designated by a branch instruction, and when the branch instruction is included in the program block of the input/output unit in execution being executed, said processor reads the input/output unit specified by the data.

5. (ORIGINAL) A numerical controller according to claim 1, wherein said processor reads only an input/output unit or input/output units to be edited from said storage device or medium through said interface.

6. (ORIGINAL) A numerical controller according to claim 5, wherein said processor reads only an input/output unit to be edited and modifies a program block and an effective data length included in the read input/output unit.

7. (CURRENTLY AMENDED) A numerical controller according to claim 5, wherein said processor deletes an input/output unit by changing rear input/output unit data of an a preceding input/output unit designated by front input/output unit data of the input/output unit to be deleted to rear input/output unit data of the input/output unit to be deleted, and by changing front input/output unit data of an a succeeding input/output unit designated by rear input/output data of the input/output unit to be deleted to the front input/output data of the input/output unit to be deleted.

8. (CURRENTLY AMENDED) A numerical controller according to claim 5, wherein said processor adds a new input/output unit including program block data and additional information, and changes rear input/output unit data of an a preceding input/output unit designated by front input/output data of the input/output unit to be added to data specifying the input/output unit to be added, and changes front input/output unit data of an input/output unit designated by the rear input/output data of the a succeeding input/output unit to be added to data specifying the input/output unit to be added.

9. (NEW) A numerical controller for controlling a machine according to a machining program, comprising:
a storage device storing a plurality of input/output units, each of the input/output units

including program data obtained by dividing the machining program, each of the input/output units including additional information associated with the program data, the additional information including first input/output unit data designating an input/output immediately preceding each input/output unit in a sequence of the machining program, and second input/output unit data designating an input/output unit following each input/output unit in the sequence of the machining program; and

a processor processing the input/output units.

10. (NEW) A numerical controller according to claim 9, wherein when a branch instruction is included in the program block of an input/output unit being executed by said processor, said processor reads the input/output unit preceding the input/output unit being executed using the first input/output data, and reads the input/output unit following the input/output unit being executed using the second input/output data.

11. (NEW) A numerical controller according to claim 9, wherein said processor deletes an input/output unit by changing the second input/output data of a preceding input/output unit designated by the first input/output unit data of the input/output unit to be deleted to the second input/output unit data of the input/output unit to be deleted, and by changing the first input/output unit data of a following input/output unit designated by the second input/output unit data of the input/output unit to be deleted to the first input/output unit data of the input/output unit to be deleted.

12. (NEW) A numerical controller according to claim 9, wherein said processor adds a new input/output unit including program data and additional information, changes the second input/output unit data of a preceding input/output unit designated by the first input/output unit data of the input/output unit to be added to data specifying the input/output unit to be added, and changes the first input/output unit data of an input/output unit designated by the second input/output unit data of the succeeding input/output unit to be added to data specifying the input/output unit to be added.